AdvanceHE

MEMBER BENEFIT

Multimodal Learning: A Practitioner Guide

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Contents

Introduction

Digital media has changed the way we communicate, source, and share information. Our students receive and transmit information across a range of modes when they socialise, engage in education or enter the workplace. Students bring diverse experiences to higher education in terms of their academic skills, communication environments (Bouchey et al, 2021), as well as cultural and geographical backgrounds. This is one reason why multimodal learning matters. As teachers, we have a role in familiarising ourselves with how our students interpret learning materials and resources, as well as understanding the various contexts in which learning can occur and transform into practice. Through multimodal learning, students can be supported to co-construct knowledge across different forms of expression, drawing on their prior experiences in authentic social and cultural settings.

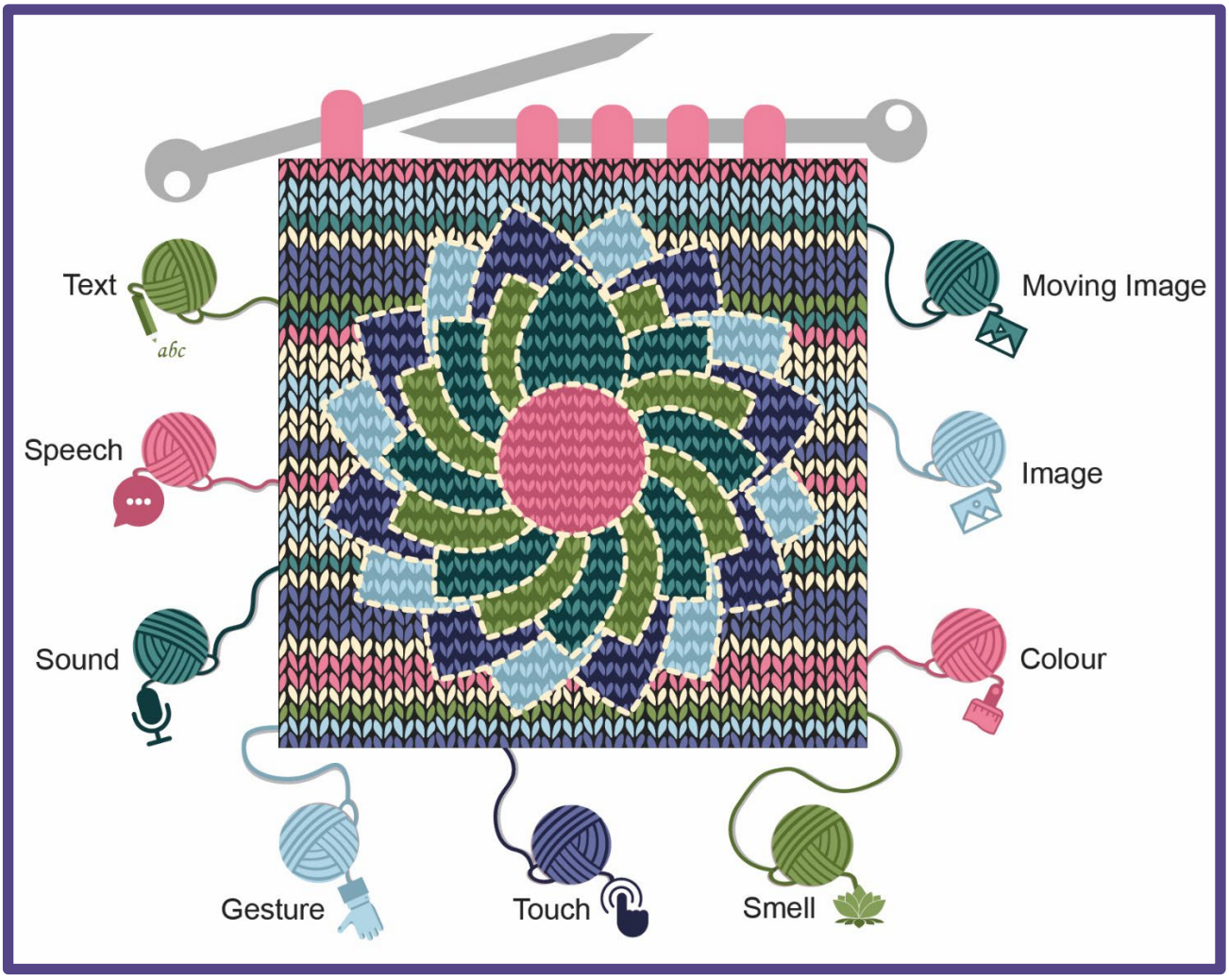


Image: The different potential modes of a multimodal artefact

Students learn through meaning-making and grow their meaning-making resources to express ideas, experiences, and identities (Kress, 2010). Multimodal learning involves the teacher's orchestration and use of a range of semiotic modes (such as written text, speech, image, sound, movement, gesture, touch, colour, style) in the design of the students' learning experience (Lim & Tan-Chia, 2023). Multimodal texts are defined by the presence of multiple semiotic modes within *one* communication, for example, an infographic combines at least two modes: image and written text. Multimodal learning is about the thoughtful use of multimodal texts and design of interactive activities across media, forms and formats in the students' learning experience applied appropriately to the given context (van Leeuwen, 2017).

Resources that can mediate multimodal learning include more than one mode, such as video (image/text/sound/movement), dance (image/movement), virtual simulation (image/audio/movement/touch), material artefacts (touch/image), as well as teachers' use of gaze, movement and gestures during sessions. Multimodal learning also involves the use of 'semiotic technologies' such as collaborative tools, visualisation apps, online quizzes, learning analytics platforms that shape the ways of knowledge representations and pedagogic interactions in the classrooms (Lim, 2021). For learning modalities, e.g. hyflex, hybrid, a/synchronous online, self-directed learning, please see Advance HE's guide: Beyond Flexible Learning.

This multimodal learning guide is organised into four areas:

1. Multimodal representations in teaching
2. Encouraging interaction and communication
3. Designing learning-centred activities
4. Offering multimodal assessment

Each section includes vignettes to spark ideas with further case studies available via the Advance HE website.

Multimodal representations in teaching

What?

Using multimodal resources in your teaching can be a great way to engage students in exploring, representing, constructing, interpreting and evaluating knowledge (Lim & Tan-Chia, 2023). Engineers, for example, frequently use multimodal artefacts such as diagrams or 3D-objects. Health professionals design and/or show illustration, diagrams, animations and digital simulations to demonstrate knowledge and skills to students. You may already be incorporating multimodal representations in your practice through the use of:

+ interactive digital media to teach concepts via combined modalities through using text, image and audio;
+ gestures, touch or movement in your lectures and seminars to emphasise or illustrate learning points;
+ models, comics, charts, digital storytelling, role-play, dance, discussion boards, photography, drawing, painting or sketching and immersive learning environments.

You may also be providing content to students in alternative formats so that students can choose, for instance, between a textbook, visual slides, audio or video recording of lectures.

Why?

The idea behind multimodal learning is that focusing on purely or mostly on one mode of communication (e.g. just audio, or just text) would be insufficient to communicate and develop meanings effectively (Kress, 2010). Instead, the assembly of different modes should bring new perspectives and insights in one's communication. Students also benefit from a heightened sense of engagement when using multiple senses when learning (The Economist Group, 2022).

The affordances of technological tools, such as semiotic technologies, offer new ways in which students can express their ideas, experiences, and identities. Technologies also support multimodal knowledge representations, where disciplinary content can be presented in the form of videos, educational apps, on websites and in other forms.

Through multimodal teaching, we can cater for a wide spectrum of students with diverse needs and preferences. With multimodal learning, we can provide opportunities for students to engage in meaning-making across different forms and expressions. This is also aligned with the principles of Universal Design for Learning (UDL) (Rose & Mayer, 2002), where offering optionality and variation in teaching modes can benefit all our students, supporting inclusivity. For instance, captions (text) are essential for those hard of hearing, but will be useful to all learners studying in noisy environments, or for other reasons.

How?

+ Decide on the most appropriate way to communicate your content (is it text, audio, image, movement or gestures?), paying attention to how you may combine and organise the different modes together into a coherent whole.
+ Consider the individual affordances and constraints of your selected mode and genre (e.g. layout, length). These constraints may bring out your creativity as you work within these conventions, which can yield new insights for communicating knowledge.
+ Choose (or create) learning spaces that provide the best fit for your envisaged format of multimodal learning: they can be physical/virtual, or 2D/3D, whether textbooks, websites, classrooms, museums, or immersive spaces.
+ When combining multiple modes of communication, avoid creating cognitive overload for students (see Mayer & Moreno, 2003).
+ Utilise digital tools that can help you represent your content in ways that make it easier for students to understand concepts: use tools to create infographics, or interactive multimedia content and quizzes, images, or software applications to record and edit podcasts, audio, video or animation, as well as tools for 3D, VR/XR/AR and gaming environments.
+ Explore Generative AI (GAI) technologies that can convert information from one mode to another, e.g. tools that help you create slides or images from text, or others such as speech to text, text to speech, text to animation, and vice versa. See some categories of GAI tools, and Gvirtz's use of AI-generated visuals to enhance lectures.

1. Multimodal teaching in large lectures, International Relations/Politics.

David Roberts, Loughborough University, England

I researched, created and implemented multimedia learning methods for large group lectures. This involved almost every slide in any 50-deck lecture being a high-quality, full-slide apposite image combined with a maximum of one line of clearly-visible text, both (image and text) related directly to the audio (spoken) content being delivered.

How we measured efficacy

Longitudinal randomised control trials combined with surveys of student participants showed increases for dyslexic students in 1) levels of student engagement, 2) levels of active learning, and 3) engagement and active learning.

2. Sensory teaching, Marketing.

Roger Saunders, De Montfort University, England

In class, I teach various aspects of marketing using touch with items such as buttons, Lego etc., or taste, by asking students to perform a blind taste test to explore perceptions of branding and quality, and smell, getting students to discuss added value using smell jars. In teaching sessions and in the VLE, I use visual images, and provide a separate mp3 for my flipped lectures, so that they can be listened to with sound only.

How we measured efficacy

Anecdotal evidence as well as module feedback and performance comparisons have been positive.

3. Immersive environment, Veterinary pathology.

Lorenzo Ressel, University of Liverpool, England

In Pathology teaching, we use photogrammetry to create life-like organs and tissues, which we embed as 3D models in lectures, using QR codes and we are building Augmented Reality and Virtual Reality scenarios where these can be experienced in the most immersive way. In a subject like veterinary pathology, it is very important to understand how organs are organized spatially and interconnected to each other, therefore the 3D experience enhances the understanding of their shape and structure.

How we measured efficacy

Survey with third year students on the use of 3D models in pathology lectures material, (see Ricci, Leeming and Ressel, 2024).

Encouraging interaction and communication

What?

Multimodal learning can frame interactions between the teacher and students. Teachers can use multimodal resources and artefacts in and out of the classroom to promote collaboration and interaction. Semiotic technologies can shape the teacher/student and student/student relations (Lim, 2021). Teachers should choose the digital tools based on the kind of interaction they enable in the classroom. For example, discussion boards or visual collaboration tools for student/student and teacher/student exchanges. Multimodal learning analytics can also be used to inform both teachers and students on the nature of their learning activities and interactions.

Why?

Using multimodal artefacts to promote active learning and engagement between students can lead students to new insights and perspectives, stimulate empathy and promote critical and creative thinking (Jiang & Gao, 2020; Lacković, 2020). The use of a range of multimodal technologies affords different peer interactions, increasing the ways students make meaning. This can also support students who may have difficulty expressing themselves in a particular mode (Bouchey et al., 2021). Collaborative tasks can also nurture students' digital capabilities in authentic contexts. Providing online communication channels, with setting expectations about how and when to respond, can also help increase student belonging (Blake et al., 2022).

How?

+ Before a course commences, multimodal communication could replace reliance on written information to highlight important student information, for instance an infographic with module and assessment timelines in the module handbook.
+ Consider the use of digital tools and platforms in terms of how they will shape the teaching and learning interactions.
+ Provide guidance on expectations for teacher/student interactions; get them to agree their own ground rules for student/student communications.
+ During in-person or virtual classroom sessions, offer an online backchannel where students can contextualize the lecture with peers.
+ Consider students' previous knowledge, skills and motivation in using your selected multimodal artefact, resource or technology – they may need technical support, encouragement and modelling in their use.

+ Ensure all students have access to the selected multimodal learning environment via a UDL approach. If relevant, consider offering students alternatives: photos or videos can be replaced with a quote or transcript, or visual metaphors can be described in alternative forms for those less comfortable with metaphors.
+ Ask for students' reflections on skills learnt when using new modes of communication.

4. Student/student engagement through Lego Serious Play, PGCert in HE.

Mary Jacob, Aberystwyth University, Wales

I get PGCert participants to think creatively about their teaching. First, I share ideas about metaphors for learning and teaching and then put piles of LEGO bricks on tables so that they can work in groups and individually. They build up a model of their metaphor using the bricks and then explain it to peers at the same table. The focus is structuring their thoughts, i.e. on the process, not on the physical artefact itself. Participants then post a photo, and comment and build on each other's ideas within a discussion board. This gives them a great start to developing their teaching philosophy through a supportive community of practice.

How we measured efficacy

The discussion board activity is assessed. During the LEGO activity, we observe engagement and interaction, ask questions and give feedback. When talking about metaphors for learning and teaching based on their LEGO constructions, a frequent comment from participants is that, while they didn't have a metaphor in mind at the start, working with LEGO helped them to realise and develop their thinking.

5. Student/student interactions - COIL project.

Nayiri Keshishi, University of Surrey, England

The UGPN Academy is a Collaborative Online International Learning (COIL) project across 3 universities. Students work asynchronously in international peer groups to create a multimedia poster on their chosen UN Sustainable Development Goal (SDG). The 3-week project including research, design and fact-checking concludes with an online poster conference, where groups present to a panel with prizes awarded. Digital platforms (Zoom and Slack) are used to host the posters, live events and build a shared team spirit.

How we measured efficacy

We conducted a pre and post participation survey, showing that students self-reported development in openness & learning mindset, empathy & compassion, communication skills, critical thinking, co-creation skills and creativity.

Designing learning-centred activities

What?

The framework for multimodal learning by Lim and Tan-Chia (2023) introduces four learning processes in multimodal learning. The processes are encountering, exploring, evaluating and expressing:

+ **Encountering** would be the student or the teacher bringing a multimodal artefact to which students respond or are guided to notice the ways meanings are constructed in these multimodal texts, drawing on their prior knowledge and emotional response.
+ **Exploring** entails the teacher guiding and modelling for students on ways of engaging with multimodal texts.
+ **Evaluating** is about having students develop critical perspectives on a multimodal text, for instance by encouraging students to compare and contrast ways a message can be presented across different texts and forms.
+ **Expressing** involves empowering students to create multimodal artefacts either individually or as a group activity. The goal is to have students become active designers of meaning, capable of representing their ideas, experiences, and identities in multimodal ways.

Students can also create and use multimodal artefacts to enhance their self-directed learning, such as physical or virtual mindmaps, flashcards to help test their learning, or utilising digital tools to create multimodal plans and timetables to manage their learning.

Why?

In light of the nature of contemporary communication, we need to be able to develop critical capabilities in our students to not just access and understand but to critique and evaluate as well as to represent meanings across different multimodal texts. Multimodal learning environments can emphasize the relevance and real-life application of subjects in an engaging context. Multimodal approaches actively engage students in their learning (Bezemer & Kress, 2015), and can meet their unique learning needs, encouraging interdisciplinary thinking and inclusivity (The Economist Group, 2022).

How?

+ Help students draw connections between their academic learning in the classroom and their life experiences, for instance by choosing multimodal texts from their own authentic settings (Cope & Kalantzis, 2015).

+ Introduce a 'pedagogic metalanguage' (Lim & Tan-Chia, 2023) for thinking and talking about multimodality. This is a useful toolkit or common language that helps students to discuss, describe, analyse and interpret multimodal texts. To develop this common language, ask students questions such as: What are the *features* of a poster or an infographic? What semiotic modes are used and in what ways do they *express* ideas - e.g. title, a main visual idea, colour contrast, font type and size? How do these *interact with each other* to create extra meaning? This can be done via explicit teaching and modelling or by letting students explore how meanings are created in the selected multimodal genre. See also Archer (2016) for creating multimodal arguments and Lacković (2020) for introducing inquiry graphics in higher education.

+ Facilitate students' application of form and genre conventions appropriately and/or creatively to help their transfer of learning into new contexts (Kress, 2010). This could include students converting communication from one mode or genre into another: turning coursework (text) into an infographic (image + text), summarising an essay (text) in a social media post (text) etc.

+ Provide students with opportunities to co-construct knowledge through collaborative, peer learning activities that draw on and value students' prior knowledge and experiences (Lacković, 2020; Lim &Tan-Chia, 2023).

+ Explore or create digital media with students to expand the potential for meaning-making by drawing students' attention to how meaning is created. Ask questions as to what it is about, who is acting, how it is structured, what its context is and who it is for, and how these functions are expressed through the media's contained forms (text, image, object, body, space, sound and speech) (Cope & Kalantzis, 2021).

+ Facilitate student reflection around the process of meaning-making in multimodal contexts, focusing not just on the outputs and outcomes, but also on the process and the skills that students have developed.

+ Ask students to critically examine the meanings presented in the multimodal artefacts to recognise different perspectives: what may be missing, excluded, or ignored?

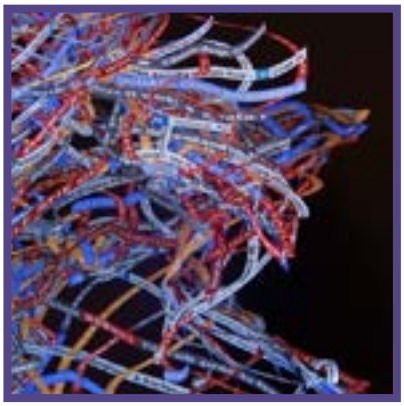
+ Develop an awareness with students as to how modes are valued in different contexts inside and outside academia. Consider what forms of communication students are being expected (often implicitly) to understand, and how students can be taught the skills to make and interpret multimodal texts (Jewitt, 2017).

6. Knowledge exploration, interpretation and evaluation, Digital Art.

Dima Alnsour, Mohamed bin Zayed University of Artificial Intelligence, UAE

Students in groups select a digital art installation or exhibit encountered during a gallery visit to critically analyze the technological elements, usability, interface design, and cybersecurity implications of their chosen installation. Each group presents their analysis using a format of their choice (posters/ video/ audio), on how integrating technology enhances artistic expression and fosters creativity, together with a written reflection to demonstrate the different outcomes. The activity promotes a deeper understanding of the relationship between technology and art, while encouraging students to think critically about ethical dimensions and societal impact, addressing topics e.g. copyright and privacy.

How we measured efficacy



Student feedback and performance were positive. The multimodal assessments and choices contributed to increased engagement and participation.

7. Using Padlet to illustrate the research process, Pre-sessional English.

Ryan Simpson, University for the Creative Arts, England

The final part of a pre-sessional English language course on art activism concludes with a speaking task that requires students to add multimodal posts to Padlet showing their research process for an essay, including pictures, photos, text. The ten-minute ‘reflective interview’ task is assessed by the tutor via a one-to-one interview, in which the goal is to test communicative ability in an EAP (English for Academic Purposes context, but more specifically, a degree of critical thinking, autonomy and reflection on a research process.

How we measured efficacy

I have constructed a framework that I use as a reflective practitioner to analyse the interviews from the perspective of communicative competence displayed. We have observed a high level of learner engagement in building the Padlet. Its use also allows for peer practice, as learners show and discuss posts that they have added.

Offering multimodal assessment

What?

Multimodal assessment involves students creating, exploring, evaluating or interpreting multimodal artefacts, as part of a formative or summative assessment task. Examples of multimodal assessment could include students working with:

+ Images, diagrams, drawings or maps;
+ Oral presentations or performances (live);
+ Audio or podcast recordings;
+ Video, screen recordings or storyboards;
+ Digital stories or animations;
+ Infographics, posters, collages, comic strips, memes;
+ Blogs, wikis, websites;
+ Social media platforms;
+ Or any other digital/analogue formats where multiple modes are present.

Students may also be offered a choice as to which format they would like to submit (*flexible* or *negotiated* assessment, for example, a report, a podcast or a video), or required to submit multiple pieces of assessments (e.g. *patchwork* including a written reflection, a video summary and an infographic) to demonstrate different competencies or learning outcomes. In both these examples of practice, the individual pieces themselves can be multimodal. In addition, feedback practices can also be multimodal: Payne (2023) highlights the benefits of providing screencasts of feedback.

Why?

When students engage in composing multimodal artefacts, the process of choosing and orchestrating, assembling different modes to make meaning, they deepen their learning (Kress, 2010; O'Donnell, 2020). One purpose of multimodal assessments can be to build students' knowledge, confidence and skill in presenting specialist content to different audiences, contexts and purposes (Jorre De St Jorre et al., 2021), making tasks more meaningful and authentic, fostering employability, and boosting engagement (Ross et al, 2020). Multimodal composing, since it is usually digitally mediated, can also improve students' digital fluency.

How?

In designing the assessment:

+ Enable discussion with colleagues and students around the varied and different ways that learning outcomes can be achieved.
+ For multimodal creation, have students follow the five stages of design thinking: understand the audience, develop the message, brainstorm the possibilities, create a draft and improve from feedback (Lim &Tan-Chia, 2023).
+ Foreground your students as designers (producers) in multimodal assessments (O'Donnell, 2020) that focus on the process rather than outcome. Engage students actively in presenting, rather than passively submitting, assessments.
+ When designing a multimodal assessment in alignment with learning outcomes, the multimodal aspect needs appropriate value and weighting in assessment criteria as an important source of learning (Ross et al, 2020; see the rubric case study below).
+ Facilitate students' reflection on their learning and skills gained, as well as their collaborative perspective making, including iterations and negotiations with a range of stakeholders.
+ Check if your institution has guidance on word count equivalencies. University of Liverpool's equivalencies guide is one example.
+ Explore and design in opportunities for students to create, analyse, critique multimodal artefacts with the help of generative AI.

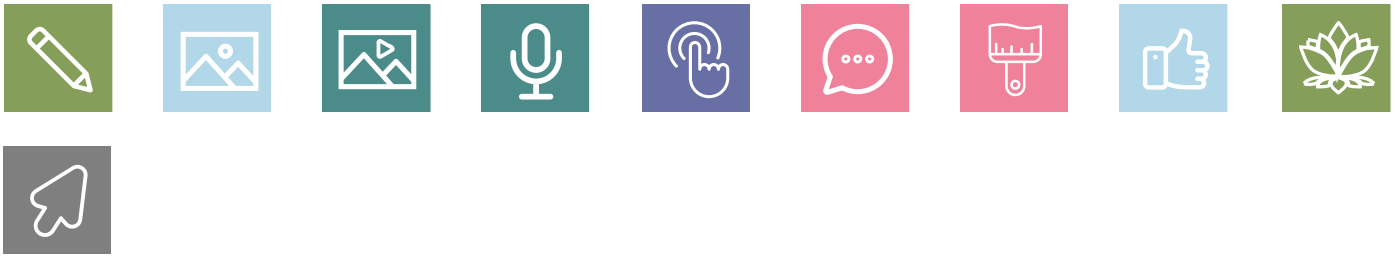
To support students in undertaking the assessment:

+ Form and content are both important in creating criticality in multimodal composing (Ross et al, 2020). Engage students as designers in choosing the 'best' modes to communicate meaning. Expose students to different multimodal genres and forms via a critical exploration of similar artefacts. What are their affordances and constraints?
+ Enable meaning-making by fostering students' creativity through conscious choice (Mavers, 2009). For instance, a 3-minute video summary of research will be succinct (constraint), while utilising the orchestration of moving image, speech and sound (affordances: e.g. illustrations, transitions, silence, pacing) to create meaning.
+ Offer skill development where needed, modelling the production of multimodal artefacts or drawing on external resources or guides, then have students produce drafts for peer and formative feedback. Such formative assessment tasks can help develop students' multimodal literacies.

+ Inclusivity tip for graduate competencies: ask students to adhere to UDL and accessibility regulations when designing multimodal artefacts, for example, producing a transcript for audios/videos; creating accessible documents when producing essays, reports, or slides, or switching on live captions during live presentations.

8. Multimodal Capstone Project, Biosciences.

Isabelle Winder, Bangor University,Wales



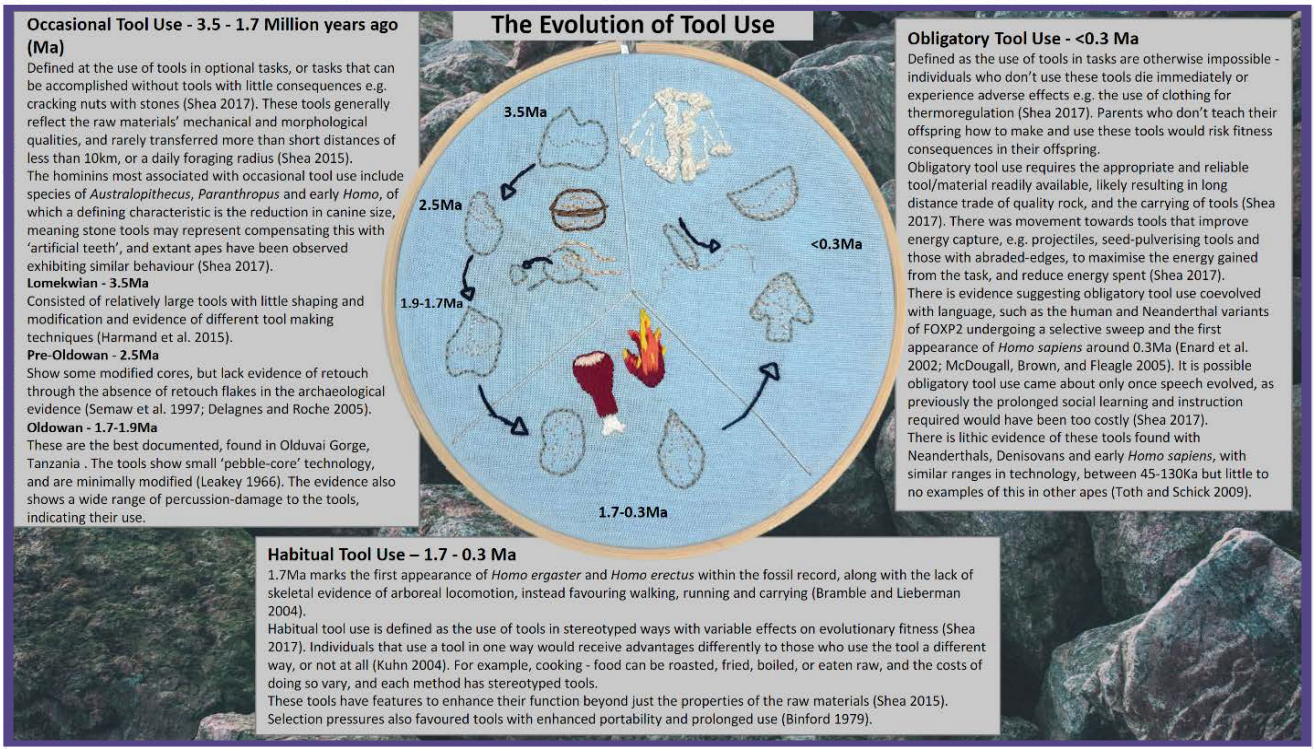
I use multimodal assessment with final-year biosciences students studying human evolution, where students need to demonstrate breadth and an ability to extrapolate their understanding and abilities to a new and often integrative field. The assessment is a portfolio of 3 communication tasks aimed at a non-specialist audience, including a ‘Fact File’ for a particular human relative, and a visual timeline of human evolution that critically explores the explanations others have put forward. In each assessment, students have a choice of subject and flexibility in layout and style. Creativity is strongly encouraged.

The final multimodal piece represents the culmination of their learning on the module. Titled ‘The Evolution Of...’, students can pick any element of human evolution, whether anatomical, behavioural, social, ecological or cultural, and present their findings in any format. Submissions have included: a cross-stitch piece showing the evolution of early humans’ use of stone tools; a video filmed behind-the-scenes in the Darwin museum, with the creator in period clothing and walking through relevant exhibit covering Darwin’s understanding of human evolution; hand-drawn cartoons about the evolution of the human hand, podcasts about the evolution of human culture, and posters on the evolution of features ranging from eye colour to parts of the brain. In each case, students have either 500 words (with unlimited illustration) to create their piece, or, for a visual/auditory piece, to write a short reflection explaining what they created and why, pointing to key sources.

My multimodal assessment uses Bangor's Assessment Framework to ensure that different formats represent similar effort. I provide the broad marking criteria in a dedicated seminar, and we agree how they 'should' adapt to accommodate different formats: what, for instance, might 'excellent presentation' look like for a cartoon, as opposed to a popular science article? This enables us to negotiate fair and specific expectations for trying something new and ensures the criteria are clear and transparent. I then provide a written copy of the criteria. I also provide discussion boards online for formative feedback from me and their peers, and support students with giving and receiving constructive criticism.

How we measured efficacy

Not only are the grades outstanding and the student and external examiner feedback very positive, I also love receiving their work!



A hand embroidered panel showing the evolution of tool use, presented with explanatory text behind it

9. Flexible Assessment, Politics.

Helen Williams, Nottingham University, England

The introductory research design and statistics module I teach was originally assessed through classic data reports. I have now moved to having a formative peer review exercise of a literature review draft, followed by a summative portfolio submission in a format of the student's choice. Students can submit a classic data report, a poster, a set of narrated slides, or an alternative mode of their choice. I adapted the same piece of work to different modes to demonstrate how the work could look. Marking has pivoted from focus on the mode and adherence to expectations of that mode, towards making the skills much more apparent, and assessing directly against achievement of the stated learning outcomes without regard for the format used, e.g. I allowed the use of bullet-points, graphical representations, focusing on levelling the playing field.

How we measured efficacy

My original module had had a significant BAME-white awarding gap, despite the changes I had adopted, making examples more inclusive, allowing students to explore topics of direct relevance to them, and permitting the access of materials a/synchronously. When I switched to this multimodal assessment, the awarding gap disappeared: originally around a 15% difference in marks has now reduced to just a 2% difference between the two groups.

10. Creating a rubric for a multimodal assessment

Ross et al. (2020) offer a framework comprising four dimensions to include in rubrics of multimodal assessments: 1) criticality, 2) cultivating creativity, i.e. how to work with constraints constructively, 3) taking a holistic approach and 4) valuing multimodality.

An example task they provide is: 'Work in pairs to create a three-minute film about your Australian cultural experience, including structured narratives, interviews, cinematic elements and a reflective account of the process'. The four rubric criteria include: *course content*, *cultural narrative experience*, *collaboration* and *cinematic elements*. The 'cinematic elements' criterion deals with multimodality:

+ **Does not** / **Meets criteria**: video provides (little or no) / some examples of: camera shots, angle, movement to create meaning, use of lighting to create atmosphere, diegetic and non-diegetic sound, editing of shots, music and graphics.

+ **Exceeds criteria:** Video provides numerous examples of: camera shots, angle, movement to create meaning, use of lighting to create atmosphere and engage audience, diegetic and non-diegetic sound related to the specific cultural experience, sophisticated editing of shots to create a compelling narrative, music and graphics.

For the criterion on *Collaboration* students include a personal statement, evidence of collaboration, taking roles, and a narrative/reflection about the choice of video elements to create meaning, explaining their cinematic choices and desired meanings, which demonstrates a focus on the process and multimodality.

For other assessment criteria examples, see O'Donnell (2020).

Considerations

+ Your students
  - Understand your students' characteristics, individual abilities and learning needs with respect to multimodal learning.
  - Support students with gaining confidence when new multimodal learning methods can prove challenging.
+ Technology
  - Consider what technologies and capabilities you need for your chosen modes of communication with students. Prioritise those that provide institutional support (e.g. VLE), but consider flexibility if needed.
  - Choose the appropriate digital tools based on how they shape the representation of your content and the teaching and learning interactions.
  - Develop critical capability in students in their choice of digital platforms for multimodal learning to promote their consideration of inclusivity and ethical behaviour.
+ Learning spaces
  - Choice and organisation of learning spaces will also influence the type of multimodal interactions you can design in the physical or virtual classroom.
+ Multimodal literacy
  - Signpost students to good examples: scaffold their learning for the relevant multimodal forms via induction, facilitate practice opportunities, particularly with digital formats that are novel to students within an academic setting (Bearman et al., 2020).
  - Consider the development of multimodal literacy at programme level, i.e. how multimodal skills are built progressively along the student's journey with low stakes, before delving into more complex, capstone assessments.
+ Inclusivity
  - Employ UDL principles to ensure inclusivity via multiple means of representation, flexible options for how we learn and express what we know (Rose & Meyer, 2002). Recognise that not all will experience multimodal compositions in the same way.
  - Utilise assistive technologies in your VLEs to develop course content in a range of modes to benefit all students (Bouchey et al., 2021).

  - Accessibility and inclusivity are not necessarily guaranteed by providing digital solutions, hence the importance of ensuring equitable access to technologies and scaffolding learners' digital skills (Bearman et al., 2020).
  - Inclusivity can be broadened to include paying attention to linguistic, geographical and cultural contexts, especially because of the digital/online aspect of multimodal compositions invite culturally diverse audiences (Kleinfeld, 2019).

+ Strategic implications for institutions
  - Be ready to articulate the value of multimodal learning to overcome potential resistance by students or your institution, concerning standards and equivalencies.
  - Nurture the multimodal literacy skills and motivation of staff: they are pivotal in creating effective multimodal learning environments (Bennett et al., 2017).
  - Develop evidence-based policies around multimodal assessments, seeking students' voice and perspectives.
  - Devise a policy for equivalencies for multimodal assessments (see e.g. UoL's guide).
  - Provide appropriate learning and teaching spaces for students (and staff) to access technology and/or software with support for creating multimodal artefacts.
  - Foster the sharing of good practices around multimodal learning via communities of practice.
  - Consider issues of sustainability, ethics and privacy concerns in advocating for multimodal learning, whether in terms of environmental impact or the long-term life of platforms and practices (Wyosicki et al., 2019).

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